CLAIM AMENDMENTS

1. (Currently Amended) An x-ray exposure method comprising directing ~~an x-ray~~ x-rays generated ~~from~~ by an x-ray source to illuminate, through a mask, a resist ~~stacked~~ on a substrate with a lower layer film ~~posed therebetween~~ interposed between the resist and the substrate, wherein

~~said~~ the lower layer film ~~containing an element~~ contains C, and ~~being composed in such a way that an~~, of elements contained within the lower layer, the element absorbing a largest amount of x-rays ~~of elements contained in the lower layer film~~ is ~~the element~~ C, ~~and~~

when ~~a film~~ thickness of ~~said~~ the lower layer film is t (nm), ~~a~~ density of ~~said~~ the lower layer film is ρ (g/cm^3), ~~an~~ absorption edge of an element absorbing a largest amount of x-rays of elements contained in ~~said~~ the substrate is As (angstrom), ~~a~~ K-shell absorption edge of ~~the element~~ C is ~~As~~ Ac (angstrom), and ~~an~~ absorption edge of an element absorbing a largest amount of x-rays of elements contained in ~~said~~ the resist is Ar (angstrom), then ~~a relation~~: $0.5\times Ar<12.4/((t\times\rho/46)^{(1/1.75)}+12.4/Ac)<Ar$ ~~is satisfied~~, and

~~a relation~~: $12.4/((t\times\rho/46)^{(1/1.75)}+12.4/As) \leq\lambda\leq Ar$ is satisfied by an average wavelength λ (angstrom) of x-rays absorbed in ~~said~~ the resist.

2. (Currently Amended) The x-ray exposure method according to claim 1, wherein the element absorbing a largest amount of x-rays of the elements contained in ~~said~~ the resist is ~~an element~~ Cl, and ~~a film~~ thickness of ~~said~~ the resist is no more than 100 nm.

3. (Currently Amended) The x-ray exposure method according to claim 2, wherein the ~~film~~ thickness of ~~said~~ the resist is no more than 40 nm.